

PETROLOGY

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12. Description of rock specimens from the Hobart area.

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The following are brief descriptions of hitherto undescribed rocks collected in the Hobart area.

64-24. Risdon Brook dam site

Basalt of intergranular and intersertal texture but with some larger pyroxenes in ophitic relationship with feldspars. Brownish glass. Average length of laths 0.2 mm.

64-196. Risdon Brook dam site, D.D.H. 4, 5.9 m

Mudstone with fine-grained matrix containing angular fragments of quartz and cloudy feldspar up to 0.5 mm across. The matrix is partly white and opaque and partly colourless and transparent. There are irregular patches of pyrite and areas of limonite staining, irregular wisps and grains of carbonaceous material and occasional grains of graphite schist.

64-197A. D.D.H. 4, 9.1 m

Fine-grained mudstone without regular texture. Matrix partly white opaque (clayey) and partly colourless transparent (sericitic and quartzitic) occasional irregular grains of quartz and cloudy feldspar up to 0.5 mm across. Some carbonaceous material.

64-197B. D.D.H. 4, 9.1 m

Shale with strips of carbonaceous material.

64-198A, B. Risdon Brook dam site, D.D.H. 4, 11.5 m, 64-198A, B. Risdon Brook dam site, D.D.H. 4, 11.5 m
64-199A, D.D.H. 4, 12.0 m

Mudstone with particles of quartz, feldspar, sericite, carbonaceous material and rock fragments up to 0.2 mm across in a fine-grained opaque white matrix. Depositional laminae, sometimes disturbed and contorted, are prominent.

64-201, D.D.H. 4, 14.9 m

Mudstone with bands of quartz and carbonates, and pyrite.

64-203A, B. D.D.H. 4, 19.4 m

Fine-grained arkose consisting of angular grains of feldspar, averaging 0.1 mm across, quartz, sericite, organic material and rock fragments. Pyrite, magnetite and carbonates are fairly common.

64-202A, B. D.D.H. 4, 16.2 m

Limestone consisting of very fine-grained carbonate with a minor amount of quartz in particles up to 0.2 mm across. Veinlets and small patches of pyrite.

64-204A, B. D.D.H. 4, 30.5 m

Very fine-grained mudstone with fragments of quartz, feldspar and sericite up to about 0.05 mm long in a matrix of material too fine-grained to give a distinct birefringence.

64-205, D.D.H. 2, 8.4 m

Limestone consisting of a mosaic of minute interlocking crystals with a little quartz.

64-206, D.D.H. 2, 4.3 m

Limestone consisting of minute grains of carbonate and crowded with outlines of organic remains.

64-241A, B. D.D.H. 8, 13.0 m,

64-242A, B. D.D.H. 8, 13.6 m

Mudstone consisting of angular grains of quartz, a few lithic fragments and occasional feldspars in an opaque white matrix of clay material.

64-243A, B. D.D.H. 8, 14.5 m

Siliceous mudstone containing angular fragments of quartz, quartzite and other lithic constituents and occasional feldspars up to 5 mm across in a matrix of opaque white material of clay grade. Pyrite is present.

64-244, D.D.H. 8, 15.2 m

Fine-grained quartz sandstone with occasional fragments of quartz, lithic constituents and feldspar up to 5 mm across. A little opaque white interstitial material of clay grade, and areas of pyrite.

64-245A, B. Risdon Brook dam site, D.D.H. 8, 16.0 m

Fine-grained porous quartz sandstone with minor lithic constituents and feldspar.

64-246A, B. D.D.H. 8, 22.6 m

Mudstone or quartz wacke consisting of grains of quartz about 0.02 mm across with minor lithic constituents and feldspar in an opaque white matrix of clay grade. Occasional grains range up to 0.25 mm across and there are many small voids. Specimen B is similar to A but has very few voids.

64-294. Old Beach

Fine-grained olivine basalt with intersertal texture consisting of occasional patches of dark glass in a felted mass of sub-radiating feldspar laths averaging 0.15 mm long. Euhedral crystals of pale brownish augite in crystals up to 1 mm long and groups of smaller crystals occur. Olivine is less common and the crystals are completely altered to iddingsite or ser-pentine.

64-322. Risdon Cove

Fine-grained sandstone composed of sub-rounded to angular grains of quartz and minor feldspars and lithic constituents with a dark limonitic cement.

64-323. Richardsons Farm, near Pass Road

Iddingsitised olivine basalt. The rock has an intergranular and sub-trachytic texture consisting of labradorite laths about 0.2 mm long with interstitial granules of pale brownish augite and magnetite. Olivine has been altered to yellowish iddingsite, which is common in irregular patches and pseudomorphs, outlined with magnetite crystals, up to 0.5 mm long.

64-332. Richardsons Farm

Fine-grained olivine basalt with trachytic and intergranular texture consisting of feldspar laths averaging 0.1 mm long, showing orientation, with granules of pyroxene and phenocrysts of olivine about 0.25 mm long, the rock being thickly disseminated with crystals and aggregates of magnetite.

64-374, 64-375. Warrane School

Medium-grained sandstone consisting of sub-rounded quartz grains averaging 0.5 mm with minor lithic constituents and feldspar. Some opaque white material of clay grade with limonitic stains, but the intergranular cement is silica.

64-376. Risdon Vale

Medium, even-grained sandstone like Specimen 374, but contains a slightly higher proportion of feldspar. The intergranular cement is in part sericitic.

64-410A, B, C. Risdon Brook

Carbonaceous mudstone consisting mainly of opaque material of clay grade stained black. Disseminated crystals of quartz up to about 0.1 mm across.

65-31. *Risdon Vale*

Mudstone, pale coloured, fine-grained rock, stained by limonite. Contains occasional detrital grains of quartz, feldspar, zircon, and muscovite in a matrix of fine-grained sericite or semi-opaque clay material.

65-154A. *Lindisfarne*

Weathered basalt showing intersertal texture, consisting of a network of feldspar laths with patches of glass and crystals of pyroxene. There are doubtful indications of olivine crystals completely altered to serpentinous material.

65-154B. *Lindisfarne*

This specimen was probably similar to Specimen 65-154A but weathering has progressed so as to almost obliterate the feldspars and other minerals, except magnetite, largely altered to limonite, which is disseminated through the rock.

65-23. *Lindisfarne*

Medium- to fine-grained sandstone with sub-angular to sub-rounded grains of quartz, and lithic material stained brown with limonite.

66-244A, B. *Flagstaff Gully*

Siltstone, mainly with a grain size of between 0.1 mm and 0.01 mm. The grains are mainly of quartz with a few organic particles, and the whole rock is stained with limonite.

66-299. *Flagstaff Gully*

Siltstone of more even grain than Specimen 66-244, but containing occasional larger grains up to 0.5 mm. This rock also contains a larger proportion of very fine-grained micaceous material.